

SELF ASSEMBLED THREE-DIMENSIONAL PHOTONIC CRYSTAL

ABSTRACT OF THE DISCLOSURE

A method of making a photonic crystal
5 includes obtaining single spheres for use in making a
self assembled opal structure. Spherical particles
are placed centrifuge and separated from doublets
using a relative difference in sedimentation velocity
in response to centrifugal force. A method includes
10 drawing a substrate through a meniscus at a
declination to uniformly deposit spheres on the
substrate. Three-dimensional photonic crystals
including buried waveguides are also provided.